

1 receiving one or more instruct signals which are effective to instruct said
2 plurality of potential user stations to transmit said programming signal according to a
3 transmission schedule and and log transmission of said programming signal;

4 selecting one of the group consisting of:

5 (1) a time at which to communicate a first of said one or more instruct
6 signals; and

7 (2) a memory location to which to communicate a first of said one or
8 more instruct signals;

9 communicating said first instruct signal at said selected time or to said selected
10 memory location; and

11 storing said programming signal and said first instruct signal at said storage
12 device.

13 4. The method of claim 3, further comprising one of the steps of:

14 embedding said first instruct signal in said programming signal;

15 embedding a code in said programming signal that enables a processor to control
16 a presentation of said mass medium programming contained in said programming
17 signal in accordance with said first instruct signal;

18 communicating a program unit identification code to said storage device and
19 storing said program unit identification code at a storage location associated with said
20 programming signal;

21 communicating to and storing at said storage device some information to
22 evidence an availability, use, or usage of said programming signal or said mass medium
23 programming contained in said programming signal at a user station;

1 communicating to and storing at said storage device a second instruct signal
2 which is effective at a user station to generate some output to be associated with said
3 programming signal or said mass medium programming contained in said
4 programming signal;

5 communicating to and storing at said storage device a second instruct signal
6 which is effective to generate some output to be associated with a product, service, or
7 information presentation;

8 communicating to and storing at said storage device a second instruct signal
9 which is effective to display a combined or sequential presentation of a mass medium
10 program and a user specific datum;

11 communicating to and storing at said storage device a second instruct signal
12 which is effective to process a user reaction to said mass medium programming
13 contained in said programming signal;

14 communicating to and storing at said storage device a second instruct signal
15 which is effective to communicate to a remote station a query in respect of information
16 to be associated with said programming signal or to enable display of said mass
17 medium programming contained in said programming signal;

18 communicating to and storing at said storage device a second instruct signal
19 which is effective to control a user station to receive information to supplement said
20 programming signal or said mass medium programming contained in said
21 programming signal;

1 communicating to and storing at said storage device a second instruct signal
2 which is effective to process a digital television signal which is separately defined from
3 standard analog television; and

4 communicating to and storing at said storage device a code or datum to serve as
5 a basis for enabling an output device to display at least some of said mass medium
6 programming contained in said programming signal or for enabling a processor to
7 process some executable code.

8 5. The method of claim 3, wherein said selected memory location is within
9 said programming signal at said storage device, said method further comprising the
10 step of storing some information at said storage device that evidences one or more of:

- 11 (1) a title of a television program;
- 12 (2) a proper use of programming;
- 13 (3) a transmission station;
- 14 (4) a receiver station;
- 15 (5) a network;
- 16 (6) a broadcast station;
- 17 (7) a channel on a cable system;
- 18 (8) a time of transmission;
- 19 (9) a identification of an instruct signal;
- 20 (10) a source or supplier of data;
- 21 (11) a publication, article, publisher, distributor, or an advertisement;
- 22 and

1 (12) an indication of copyright.

2 6. The method of claim 3, said method further comprising the steps of:
3 selecting one from the group consisting of:

4 (1) a datum that identifies a unit of computer software in said
5 programming signal;

6 (2) a datum that specifies some of a way to instruct receiver end
7 equipment what specific programming to select to play or record
8 other than that immediately at hand, how to load it on player or
9 recorder equipment, when and how to play it or record it other
10 than immediately, how to modify it, what equipment or channel or
11 channels to transmit it on, when to transmit it, and how and where
12 to file it or refile it or dispose of it;

13 (3) a datum that designates an addressed apparatus;

14 (4) a datum that specifies where, when, or how to locate a signal;

15 (5) a datum that informs a processor of a fashion for identifying and
16 processing a signal;

17 (6) a datum that is part of a decryption code;

18 (7) a comparison datum that designates a communication schedule;

19 and

20 embedding said selected one in said programming signal.

1 7. The method of claim 3, wherein said storage device comprises a file storage
2 medium and said programming signal and said first instruct signal are stored in a file
3 on said file storage medium, said method further comprising the steps of:

4 selecting a second instruct signal, said second instruct signal being one from the
5 group consisting of:

- 6 (1) a switch control signal;
- 7 (2) a timing control signal;
- 8 (3) a locating control signal;
- 9 (4) an instruct-to-contact signal that designates a remote receiver
10 station;
- 11 (5) an instruct-to-transfer signal that designates a unit of broadcast or
12 cablecast programming;
- 13 (6) an instruct-to-delay signal that designates a unit of broadcast or
14 cablecast programming;
- 15 (7) an instruct-to-decrypt or instruct-to-interrupt signal that designates
16 a unit of programming and a way to decrypt or interrupt;
- 17 (8) an instruct-to-enable or instruct-to-disable signal that designates an
18 apparatus;
- 19 (9) an instruct-to-record signal that designates a broadcast or cablecast
20 program;
- 21 (10) an instruction signal that controls a multimedia presentation;
- 22 (11) an instruction signal that governs a broadcast or cablecast receiver
23 station environment;

- 1 (12) an instruct-to-power-on signal that designates a receiver;
- 2 (13) an instruct-to-tune signal that designates a receiver or a frequency;
- 3 (14) an instruct-to-coordinate signal that designates two apparatus;
- 4 (15) an instruct-to-compare signal that designates a news transmission
- 5 or a computer input;
- 6 (16) an identifier signal that causes a computer to instruct a plurality of
- 7 tuners each to tune to a broadcast or cablecast transmission;
- 8 (17) an instruct-to-coordinate signal that designates two units of
- 9 multimedia information and one of: (1) an output time and (2) an
- 10 output place;
- 11 (18) an instruct-to-generate signal that designates an output datum;
- 12 (19) an instruct-to-transmit signal that designates a computer output;
- 13 (20) an instruct-to-overlay signal that designates a video image;
- 14 (21) an instruct-that-if signal that designates a function to perform if a
- 15 predetermined condition exists;
- 16 (22) an instruct-to-enable-and-deliver signal that designates information
- 17 that supplements a video image;
- 18 (23) an instruct-to-transmit signal that designates a computer peripheral
- 19 storage device;
- 20 (24) a code signal that designates a datum to remove or embed; and
- 21 (25) a signal addressed to a receiver station apparatus; and
- 22 storing said selected second instruct signal in said file on said file storage
- 23 medium.

Sub C3 1 8. A method of generating and encoding signals to control a plurality of
2 potential user stations comprising the steps of:
3 receiving and storing a program that contains video information;
4 receiving an instruction, said instruction having effect at said plurality of user
5 stations to transmit said program according to a transmission schedule and and log
6 transmission of said program;
7 encoding said instruction, said step of encoding translating said instruction to a
8 control signal, said control signal for directing a processor at a user station to perform
9 said effect indicated by said instruction with said program, said control signal
10 interacting with predetermined user data, said predetermined user data being
11 potentially different at each of said plurality of potential user stations; and
12 storing said control signal from said step of encoding in conjunction with said
13 program.

14 9. The method of claim 8, wherein supplemental program material is stored
15 at the same location as said processor and said control signal from said step of encoding
16 directs said processor to generate a video overlay that is coordinated with said video
17 information in said program, said method further comprising one step of the group
18 consisting of:

19 storing supplemental program material in conjunction with said program and
20 said control signal; and

21 storing a second control signal in conjunction with said program and said control
22 signal from said step of encoding, said second control signal having effect at a user

1 station to query a remote station or receive supplemental program material in a
2 broadcast or cablecast transmission.

3 *Handwritten: 10.5* 10. The method of claim 8, wherein said control signal from said step of
4 encoding directs said processor to generate a video overlay that is coordinated with
5 said video information in said program, said method further one step of the group
6 consisting of:

7 transmitting a combined video signal from said program and said video overlay
8 generated by said processor over a broadcast or cablecast network to a plurality of
9 receiver stations; and

Handwritten: b1, cond 10 transmitting a combined video signal from said program and said video overlay
11 generated by said processor to a co-located video display.

Handwritten: sub 10.4 12 *Handwritten: 11* 11. The method of claim 8, further comprising the steps of:

13 receiving a second instruction, said second instruction being one of the group
14 consisting of:

- 15 (1) an instruction which is effective at a user station to generate some
16 output to be associated with said program;
17 (2) an instruction which is effective at a user station to generate some
18 output to be associated with said product, service, or information
19 presentation;
20 (3) an instruction which is effective at a user station to display a
21 combined or sequential presentation of a mass medium program
22 and a user specific datum;

- 1 (4) an instruction which is effective at a user station to process a user
2 reaction to said program;
- 3 (5) an instruction which is effective at a user station to communicate to
4 a remote station a query in respect of information to be associated
5 with said program or to enable display of said program;
- 6 (6) an instruction which is effective at a user station to control a user
7 station to receive information to supplement said program;
- 8 (7) an instruction which is effective at a user station to process a digital
9 television signal which is separately defined from standard analog
10 television; and
- 11 (8) an instruction which is effective at a user station to serve as a basis
12 for enabling an output device to display at least some of said
13 program or for enabling a processor to process some executable
14 code.

15 encoding said second instruction, said second step of encoding translating said
16 second instruction to a second control signal, said second control signal for directing
17 said ancillary processor to perform said specified second effect indicated by said second
18 instruction with said program; and

19 storing said second control signal from said second step of encoding in
20 conjunction with said program.

21 12. The method of claim 8, further having one the group consisting of:
22 embedding said control signal in the non-visible portion of a television signal;

1 embedding a code in said program that enables a computer or controller to
2 control a presentation of said program in accordance with said control signal;
3 communicating a program unit identification code and storing said program unit
4 identification code at a storage location associated with said program; and
5 communicating to and storing at a storage location associated with said program
6 some information to evidence an availability, use, or usage of said program at a user
7 station.

8 13. A method of communicating data and update material to a network of a
9 plurality of data receiver stations each of which includes a broadcast or cablecast data
10 receiver, a data storage device, a control signal detector, a computer capable of
11 processing data, and with each said receiver station adapted to detect and respond to
12 one or more instruct signals and to store data for subsequent processing, and with at
13 least one of said plurality of data receiver stations further including a transmitter, said
14 method of communicating comprising the steps of:

15 (1) receiving data to be transmitted and delivering said data to a broadcast or
16 cablecast transmitter;

17 (2) receiving one or more instruct signals which in said network are effective
18 to transmit said data according to a transmission schedule and and log transmission of
19 said data;

20 (3) transferring said one or more instruct signals to a transmitter; and

21 (4) transmitting a broadcast or cablecast information transmission comprising
22 said data and said one or more instruct signals.

1 14. The method of claim 13, wherein some identification data or said one or
2 more instruct signals are embedded in a television signal containing said data.

3 15. The method of claim 13, wherein said step of transmitting directs said
4 broadcast or cablecast transmission to said plurality of receiver stations at the same time
5 and each of said plurality of receiver stations receives or responds to said one or more
6 instruct signals concurrently.

7 16. The method of claim 13, wherein said step of transmitting directs said
8 broadcast or cablecast transmission to said plurality of receiver stations at different
9 times and each of said plurality of receiver stations responds to said one or more
10 instruct signals at a different time.

11 17. The method of claim 13, further comprising the steps of receiving said
12 data at a receiver in said broadcast or cablecast transmitter station, communicating said
13 data unit from said receiver to a memory location, and storing said data unit at said
14 memory location for a period of time prior to communicating said data unit to said
15 transmitter.

16 18. A method of communicating program material to a network of a plurality
17 of receiver stations each of which includes a broadcast or cablecast program receiver, an
18 output device, a control signal detector, a processor operably connected to said output
19 device, with each said receiver station adapted to detect and respond to one or more
20 instruct signals, and with at least one of said plurality of receiver stations further
21 including a transmitter, said method of communicating comprising the steps of:

1 (1) receiving a program to be transmitted at a transmitter station and
2 delivering said program to a transmitter;

3 (2) receiving one or more instruct signals at said transmitter station, said one
4 or more instruct signals in said network operate to transmit said program according to a
5 transmission schedule and and log transmission of said program;

6 (3) transferring said one or more instruct signals to a transmitter; and

7 (4) transmitting from said transmitter station an information transmission
8 comprising said program and said one or more instruct signals.

9 19. The method of claim 18, wherein some identification data or said one or
10 more instruct signals are embedded in a mass medium program signal containing said
11 program.

12 20. The method of claim 18, wherein said step of transmitting directs said
13 broadcast or cablecast transmission to said plurality of receiver stations at the same time
14 and each of said plurality of receiver stations receives or responds to said one or more
15 instruct signals concurrently.

16 21. The method of claim 18, wherein said step of transmitting directs said
17 broadcast or cablecast transmission to said plurality of receiver stations at different
18 times and each of said plurality of receiver stations responds to said one or more
19 instruct signals at a different time.

20 22. The method of claim 18, further comprising the steps of receiving said
21 program at a receiver in said transmitter station, communicating said program from

1 said receiver to a memory location, and storing said program at said memory location
2 for a period of time prior to communicating said program to a transmitter.

3 23. A method of controlling a network of a plurality of receiver stations each
4 of which includes a broadcast or cablecast signal receiver, at least one processor, a
5 signal detector, said signal detector adapted to receive signals from a broadcast or
6 cablecast signal, and said processor programmed to respond to signals from said
7 detector, with at least one of said plurality of receiver station further including a
8 transmitter, said method of controlling comprising the steps of:

9 (1) receiving at a broadcast or cablecast transmitter station an instruct signal
10 which is effective at said plurality of receiver stations to transmit said instruct signal
11 according to a transmission schedule ~~and and~~ log transmission of said instruct signal;

12 (2) transferring said instruct signal from said transmitter station to a
13 transmitter;

14 (3) receiving one or more control signals at said transmitter station, said
15 control signals designating at least one receiver station of said plurality of receiver
16 stations in which said instruct signal is addressed; and

17 (4) transferring said one or more control signals from said transmitter station
18 to a transmitter, said transmitter station broadcasting or cablecasting said instruct signal
19 and said one or more control signals to said plurality of receiver stations.

20 24. The method of claim 23, wherein said instruct signal or said control signal
21 is embedded in the non-visible portion of a television signal or a multichannel
22 broadcast or cablecast signal which contains video.